

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Withdrawn): An aqueous dispersion for chemical mechanical polishing comprising abrasive grains, wherein the abrasive grains comprise:

(A) simple particles composed of at least one selected from the group consisting of inorganic particles and organic particles; and

(B) composite particles.

Claim 2 (Withdrawn): The aqueous dispersion for chemical mechanical polishing according to claim 1, wherein the simple particles (A) making up the abrasive grains are composed of inorganic particles, and the composite particles (B) are composed of inorganic organic composite particles obtained by integrally combining organic particles with inorganic particles.

Claim 3 (Withdrawn): The aqueous dispersion for chemical mechanical polishing according to claim 1, wherein an overall content of all the abrasive grains is 0.11 to 20% by mass, a content of the simple particles (A) is 0.1 to 19.99% by mass, and a content of the composite particles (B) is 0.01 to 19.9% by mass.

Claim 4 (Withdrawn): The aqueous dispersion for chemical mechanical polishing according to claim 1, wherein a value of a specific removal rate ratio (RBM/RCu) represented by a ratio of the removal rate (RBM) of a barrier metal film to the removal rate (RCu) of a copper film, in the case where the copper film and barrier metal film are polished under the same conditions, is 0.5 to 200.

Claim 5 (Withdrawn): The aqueous dispersion for chemical mechanical polishing according to claim 1, wherein a value of the specific removal rate ratio (RBM/RCu) represented by a ratio of the removal rate (RBM) of a barrier metal film to the removal rate (RCu) of a copper film, in the case where the copper film and barrier metal film are polished under the same conditions, is 10 to 200.

Claim 6 (Withdrawn): The aqueous dispersion for chemical mechanical polishing according to claim 1, wherein a value of the specific removal rate ratio (RBM/RCu) represented by a ratio of the removal rate (RBM) of a barrier metal film to the removal rate (RCu) of a copper film, in the case where the copper film and barrier metal film are polished under the same conditions, is 0.5 to 3.

Claim 7 (Currently Amended): A process for producing a semiconductor device, comprising:

polishing a surface of a semiconductor material with an aqueous dispersion for chemical mechanical polishing comprising abrasive grains and a heterocyclic compound;
wherein:

the abrasive grains comprise:

(A) simple particles comprising at least one member selected from the group consisting of inorganic particles and organic particles; and

(B) composite particles;

the composite particles (B) are composed of inorganic organic composite particles obtained by integrally combining organic particles with inorganic particles;

the heterocyclic compound comprises at least one member selected from the group consisting of a quinolinecarboxylic acid, an indolizine, a compound having a 5-membered heterocycle, and a compound having a 6-membered heterocycle; ~~and~~

the 6-membered heterocycle comprises at least one member selected from the group consisting of 3-amino-5,6-dimethyl-1,2,4-triazine, 2,4-diamino-6-diallylamino-1,3,5-triazine, 3-amino-5,6-dimethyl-1,2,4-triazine, benzoguanamine, thiocyanuric acid, melamine, phthalazine, and 2,3-dicyano-5-methylpyrazine;

the abrasive grains are employed in an amount of 0.11 to 20% by mass, a content of the simple particles (A) being from 0.1 to 19.99% by mass and a content of the composite particles (B) being from 0.01 to 19.9% by mass; and

the composite particles (B) comprise the inorganic particles in an amount of from 1 to 2,000 parts by weight per 100 parts by weight of the organic particles.

Claim 8 (Withdrawn): A process for producing a semiconductor device, comprising the first polishing treatment step of mainly polishing a copper film of a surface to be polished of a semiconductor material and the second polishing treatment step of mainly polishing a barrier metal film with the aqueous dispersion for chemical mechanical polishing according to claim 5, conducted after the first polishing treatment step.

Claim 9 (Previously Presented): The process for producing a semiconductor device according to claim 7, wherein the inorganic particles have adhered as shell particles to the surfaces of core particles composed of the organic particles.

Claim 10 (Withdrawn): The process for producing a semiconductor device according to claim 7, wherein the organic particles have adhere as shell particles to surfaces of core particles composed of the inorganic particles.

Claim 11 (Withdrawn): The process for producing a semiconductor device according to claim 7, wherein the organic particles and inorganic particles have aggregated to each other without forming a clear-shell structure.

Claim 12 (Cancelled)

Claim 13 (Currently Amended): The process for producing a semiconductor device according to claim 7, wherein ~~a proportion of the composite particles (B) comprise the~~ inorganic particles is in an amount of from 10 to 1,000 parts by weight per 100 parts by weight of the organic particles.

Claim 14 (Previously Presented): The process for producing a semiconductor device according to claim 7, wherein an average particle diameter of the composite particles is 20 to 20,000 nm.

Claim 15 (Previously Presented): The process for producing a semiconductor device according to claim 7, wherein an average particle diameter of the composite particles is 50 to 5,000 nm.

Claims 16-17 (Cancelled)

Claim 18 (Previously Presented): The process for producing a semiconductor device according to claim 7, wherein the content of the heterocyclic compound is 0.001 to 1% by mass.

Claim 19 (Previously Presented): The process for producing a semiconductor device according to claim 7, wherein the aqueous dispersion further comprises an organic acid.

Claim 20 (Previously Presented): The process for producing a semiconductor device according to claim 19, wherein the organic acid is selected from the group consisting of malonic acid, succinic acid, maleic acid, lactic, citric acid, and combinations thereof.

Claim 21 (Previously Presented): The process for producing a semiconductor device according to claim 18, wherein the content of the organic acid is 0.1 to 5% by mass.